

Frederick County Division of Utilities & Solid Waste Management

Annual Water Quality Report

2009 Summary • Prepared for Customers of Frederick County Water Systems

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We are pleased to present this year's Annual Water Quality Report, which is designed to inform you about the water quality and services we deliver to you daily. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts and dedication of our employees who continuously strive to improve the water treatment process and protect your water resources. The Frederick County Division of Utilities & Solid Waste Management is committed to ensuring the quality of your water.



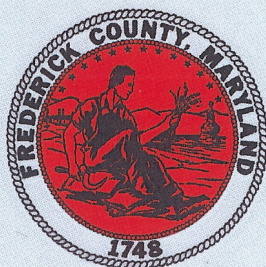
SOURCES OF WATER

Sources of drinking water, both tap and bottled water, include rivers, streams, ponds, reservoirs, springs, and wells. As water travels over the land or underground, it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, and radioactive substances. The majority of the County's water system customers receive treated water from surface water supplies, primarily the Potomac River. The remainder of our customers receive treated ground water from deep well sources.

SOURCE WATER PROTECTION

The Maryland Department of the Environment has completed source-water assessments for each of the County's water supplies. These assessments are used to implement source-water protection plans, which identify and prevent potential sources of contamination from entering your drinking water supply. More information on these assessments can be found online at www.FrederickCountyMD.gov/index.asp?NID=2026 or by contacting our offices at (301) 600-1825.

In 2009, Frederick County produced a total of 1.61 billion gallons of water at 13 treatment plants. Most (88%) was produced at the New Design Road Plant which uses the Potomac River as its source of water. The remainder was produced at numerous treatment plants using groundwater sources.



We are pleased to report that your drinking water is safe and meets Federal and State requirements.

This detailed report contains information about your water quality and what the analyses mean. In addition to the test results shown on the enclosed data table, testing has been performed on well over 100 various regulated and unregulated contaminants. These contaminants, which include volatile and synthetic organic chemicals (industrial chemicals and herbicides/pesticides), metals, other inorganic, and radiological compounds are not listed because they were not detected. Specific information on this additional testing may be obtained by contacting the Frederick County Division of Utilities & Solid Waste Management.

If you have any questions about this report or concerning your water utility, please contact Mark Schweitzer, Regulatory Compliance Department Head, at (301) 600-1825, Monday through Friday, between the hours of 7:30 a.m. and 4:30 p.m.

We want our valued customers to be informed about their water utility. Periodically, issues pertaining to your water system are addressed at regularly scheduled Board of County Commissioners' meetings. Meeting schedules with agendas and other pertinent information concerning your water system can be found online at the Frederick County Government website:

www.FrederickCountyMD.gov

Please e-mail your questions to:

wsops@FrederickCountyMD.gov

TESTING REQUIREMENTS

The Frederick County Division of Utilities & Solid Waste Management and the Maryland Department of the Environment routinely monitor the constituents in your drinking water according to Federal and State laws. This report summarizes the results of our monitoring for the period of January 1st to December 31st, 2009.

VULNERABLE POPULATIONS

Some people may be more vulnerable to contaminants in drinking water than the general population.

Immuno-compromised persons such as individuals with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice from their health care providers about their drinking water.

EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline. Call (800) 426-4791.

SPECIFIC WATER QUALITY DATA

The insert in this pamphlet provides specific water quality information regarding your water supply. It also includes other information that is related to the operation of your community's water supply system.



The Division currently serves over 50,000 residents of Frederick County from 12 different water systems. Our New Design Road Water Treatment Plant serves the majority of those customers by treating water taken from the Potomac River.

Water Supply Program

MAY 25 2010

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CUSTOMERS WITH MULTIPLE WATER SOURCES

Some of our water system customers receive water from multiple sources of supply. This typically occurs when water systems located next to each other share water between their respective distribution systems. Because the flow and movement of water in the distribution system can be non-uniform, it is difficult to accurately identify the proportion of water that comes from each water system.

If your community is supplied by multiple sources of water, you may find data from more than one water source enclosed with this report. Your specific water quality can be a combination of the multiple sources. Regardless of how many sources of water the water system uses, each source met or exceeded the standards set by EPA.

COMPLIANCE WITH SAFE DRINKING ACT REQUIREMENTS

Last year, as in years past, your tap water met all EPA and state drinking water health standards. Frederick County vigilantly safeguards its water supplies and once again we are proud to report that your water supply has not exceeded a maximum contaminant level or any other water quality standard.



All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man made. These substances can be microbes, inorganic or organic chemicals, and radioactive substances. All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants.

The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at (800) 426-4791.

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

TERMS, UNITS AND ABBREVIATIONS

PPM - Parts per Million - Analogous to one penny in \$10,000.

PPB - Parts per Billion - Analogous to one penny in \$10,000,000.

PPT - Parts per Trillion - Analogous to one penny in \$10,000,000,000.

pCi/L - Picocuries per Liter - a measure of radiation.

TT - Treatment Technique - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

AL - Action Level - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

NTU - Nephelometric Turbidity Unit - A measure of the clarity of water.

SDWA - Safe Drinking Water Act - Federal Law which regulates the water quality for public water supplies.

MCLG - Maximum Contaminant Level Goal - The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

MCL - Maximum Contaminant Level - The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

ND - Non-Detected - Means not detectable (at lowest level for which contaminant can be measured).

Water Supply Program

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ADDITIONAL INFORMATION AND RESOURCES

For more information on your water supply or the information contained in this report you may want to contact the following agencies.

Frederick County Division of Utilities & Solid Waste Management

(301) 600-1825

Maryland Department of the Environment

(410) 537-3000

(800) 633-6101

U. S. Environmental Protection Agency Safe Drinking Water Act Hotline

(800) 426-4791



Division of Utilities & Solid Waste Management Emergency Telephone Numbers

Monday thru Friday

7:00 AM - 3:30 PM

(301) 600-2187

After Hours & Weekends

(301) 600-2194

The Frederick County Commissioners and the Division of Utilities & Solid Waste Management strive to provide our customers with a safe, uninterrupted water supply. We hope that all of our customers recognize the need to protect our most precious resource, our community water supply.

An Informational Statement from EPA on Lead

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Division of Utilities and Solid Waste Management is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your drinking water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

USEFUL INFORMATION

Dispose of Unused Pharmaceuticals Properly

Unused medication should never be flushed down a toilet or sink since most wastewater treatment processes are unable to completely remove these compounds. As a result, many of these compounds wind up in bodies of water that also serve as sources of drinking water. A better solution is to bring them to a Household Hazardous Waste Dropoff Day sponsored by the Frederick County Department of Solid Waste in the spring and fall. For specific information and to see a list of acceptable and unacceptable items, check online at www.FrederickCountyMD.gov/recycle or call (301) 600-2960.



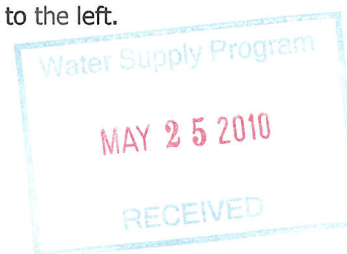
Help Prevent Sewer System Back-ups

Grease buildup and the accumulation of trash in sewer lines are common causes of sewage overflows which can contaminate sourcewater supplies and harm the environment. Residents can help to prevent this by following these simple guidelines.

DO NOT pour grease, fats, and oils from cooking down the drain. Collect grease in a container, such as a soup can, and throw it in the garbage.

DO NOT use the toilet as a wastebasket. Diapers, personal hygiene products, and baby wipes should be disposed of with household trash.

Should you see a sewage overflow, contact us immediately using the emergency telephone numbers listed to the left.



BRADFORD ESTATES WATER QUALITY INFORMATION 2009

PWSID 0100032

Your water source came from two (2) deep wells located in the Bradford Estates Development. These wells withdraw water from the Marburg Schist Formation. The Maryland Department of the Environment (MDE) completed the Source Water Assessment for the Bradford Estates community water supply in 2002. Should you care to obtain a copy of this report, the Frederick County Library has a copy, MDE has several, and the Division of Utilities & Solid Waste Management has placed a copy on the Frederick County website. MDE has determined that the Bradford Estates water supply is susceptible to nitrate, radon, and synthetic organic compounds. This water supply is not susceptible to other inorganic compounds, other radiological contaminants, volatile organic compounds, or microbiological contaminants.

REGULATED CONTAMINANTS DETECTED**Bradford Estates Water Treatment Plant**

| Parameter | Units | MCLG | MCL | Reported Level ₁ | Range ₂ | Typical Sources for Detected Contaminants |
|--|-------|------|-----|-----------------------------|--------------------|---|
| Alpha Radionuclides July 2008 | pCi/l | 0 | 15 | 1.78 | | Erosion of natural deposits |
| Barium April 2008 | PPM | 2 | 2 | 0.041 | | Erosion of natural deposits; Discharge of drilling wastes; Discharge from metal refineries |
| Di (2-ethylhexyl) phthalate September 2008 | PPB | 0 | 6 | 0.6 | | Discharge from rubber and chemical factories |
| Fluoride April 2008 | PPM | 4 | 4 | 0.72 | 0.72 - 0.92 | Erosion of natural deposits; Water additive which promotes strong teeth |
| Nitrate November 2009 | PPM | 10 | 10 | 9.2 | 5.4 - 9.2 | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits |

1 - Reported Level is the most recent value reported to MDE in 2009 unless otherwise noted.

2 - Range shows highest and lowest reported test values. Range is only reported if two or more samples were tested.

Note: Nitrate average for calendar year 2009 was 6.9 ppm based upon 52 samples. Nitrate reduction began on September 21, 2000.

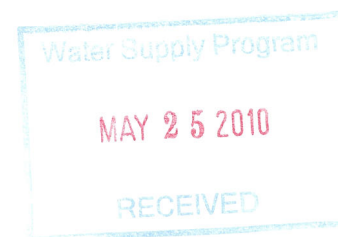
Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six (6) months of age. High nitrate levels in drinking water can cause Blue Baby Syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider.

UNREGULATED CONTAMINANTS DETECTED**Bradford Estates Water Treatment Plant**

| Parameter | Units | MCLG | MCL | Reported Level ₁ | Sample Date | Range ₂ | Typical Sources for Detected Contaminants |
|---------------|-------|------|------|-----------------------------|-------------|--------------------|---|
| Sodium | PPM | None | None | 91.8 | April 2008 | 91.8 - 94.3 | Erosion of natural deposits |

1- Reported Level is the most recent value reported to MDE.

2- Range shows highest and lowest reported test values. Range is only reported if two or more samples were tested.



LEAD AND COPPER RULE

Customer Tap

| Parameter | Units | MCLG | AL | Reported Level ₁ | Range ₂ | Sites Over Action Limit | Typical Sources for Detected Contaminants |
|--------------------|-------|------|-----|-----------------------------|--------------------|-------------------------|--|
| Lead 2008 | PPB | 0 | 15 | 5 | ND – 9 | 0 | Corrosion of household plumbing systems; erosion of natural deposits |
| Copper 2008 | PPM | 1.3 | 1.3 | 0.134 | 0.065 - 0.140 | 0 | Corrosion of household plumbing systems; erosion of natural deposits |

1 - Reported Level is 90th percentile value.

2 - Range is only reported if two or more samples were tested.

REGULATED CONTAMINANTS DETECTED

Bradford Estates Distribution System

| Parameter | Units | MCLG | MCL | Reported Level ₁ | Range ₂ | Typical Sources for Detected Contaminants |
|------------------------------------|-------|------|-----|-----------------------------|--------------------|---|
| Fluoride | PPM | 4 | 4 | 0.9 | 0.6 - 1.4 | Erosion of natural deposits; Water additive which promotes strong teeth |
| Chlorine | PPM | 4.0 | 4.0 | 1.4 | 0.6 - 2.3 | Water additive used to control microbes |
| Total Trihalomethanes 2005 | PPB | NA | 80 | 25.81 | | By-product of drinking water chlorination |
| Total Haloacetic Acids 2005 | PPB | NA | 60 | 7.03 | | By-product of drinking water chlorination |

1 - Annual average for 2009.

2 - Range is only reported if two or more samples were tested.

BACTERIOLOGICAL TESTING TABLE

| Parameter | Unit | MCLG | MCL | Level Found | Notes ₁ |
|-------------------------|------------|------|---------------------------------|-------------|--|
| Total Coliform | % Positive | 0 | 1 positive monthly sample/month | 0 | 0 positive samples out of 12 samples tested. Minimum sampling frequency is 1 sample per month. |
| E. coli Bacteria | % Positive | 0 | 1 positive monthly sample/month | 0 | 0 positive samples out of 12 samples tested. Minimum sampling frequency is 1 sample per month. |

1 - Bacteriological samples are collected from sites on the distribution system.

CAMBRIDGE FARMS WATER QUALITY INFORMATION 2009

PWSID 0100033

Your water source came from five (5) deep wells located in the Cambridge Farms Development. These wells withdraw water from the Catoctin Metabasalt Formation. The Maryland Department of the Environment (MDE) completed the Source Water Assessment for the Cambridge Farms community water supply in 2002. Should you care to obtain a copy of this report, the Frederick County Library has a copy, MDE has several, and the Division of Utilities & Solid Waste Management has placed a copy on the Frederick County website. MDE has determined that the Cambridge Farms water supply is susceptible to nitrate and some microbiological contaminants. This water supply is not susceptible to other inorganic compounds, radiological contaminants, volatile organic compounds, synthetic organic compounds, and surface water microorganisms.

REGULATED CONTAMINANTS DETECTED

Cambridge Farms Water Treatment Plant

| Parameter | Units | MCLG | MCL | Reported Level ₁ | Range ₂ | Typical Sources for Detected Contaminants |
|---|-------|------|-----|-----------------------------|--------------------|---|
| Barium July 2007 | PPM | 2 | 2 | 0.121 | | Erosion of Natural Deposits; Discharge of drilling wastes; Discharge from metals refineries |
| Beta Radionuclides₃ September 2009 | pCi/l | 0 | 50 | 2 | | Decay of natural and man-made deposits |
| Fluoride July 2007 | PPM | 4 | 4 | 0.82 | | Erosion of natural deposits; Water additive which promotes strong teeth |
| Mercury July 2007 | PPB | 2 | 2 | 0.3 | | Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills; Runoff from cropland |
| Nitrate April 2009 | PPM | 10 | 10 | 2.9 | | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits |

1- Reported Level is the most recent value reported to MDE.

2- Range shows highest and lowest reported test values. Range is only reported if two or more samples were tested.

3- EPA considers 50 pCi/l to be the level of concern for beta particles.

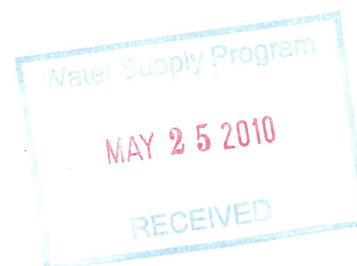
UNREGULATED CONTAMINANTS DETECTED

Cambridge Farms Water Treatment Plant

| Parameter | Units | MCLG | MCL | Reported Level ₁ | Range ₂ | Sample Date | Typical Sources for Detected Contaminants |
|----------------|-------|------|------|-----------------------------|--------------------|-------------|---|
| Sulfate | PPM | None | None | 22.4 | None | July 2007 | Erosion of natural deposits |
| Sodium | PPM | None | None | 73.0 | None | July 2007 | Erosion of natural deposits |

1- Reported Level is the most recent value reported to MDE.

2- Range shows highest and lowest reported test values. Range is only reported if two or more samples were tested.



LEAD AND COPPER RULE**Customer Tap**

| Parameter | Units | MCLG | AL | Reported Level ₁ | Range ₂ | Sites Over Action Limit | Typical Sources for Detected Contaminants |
|--------------------|-------|------|-----|-----------------------------|--------------------|-------------------------|--|
| Lead 2008 | PPB | 0 | 15 | 2 | ND – 5 | 0 | Corrosion of household plumbing systems; erosion of natural deposits |
| Copper 2008 | PPM | 1.3 | 1.3 | 0.470 | 0.105 - 0.617 | 0 | Corrosion of household plumbing systems; erosion of natural deposits |

1 - Reported Level is 90th percentile value.

2 - Range is only reported if two or more samples were tested.

REGULATED CONTAMINANTS DETECTED**Cambridge Farms Water Distribution System**

| Parameter | Units | MCLG | MCL | Reported Level ₁ | Range ₂ | Typical Sources for Detected Contaminants |
|--|-------|------|-----|-----------------------------|--------------------|---|
| Fluoride | PPM | 4 | 4 | 1.0 | 0.5 – 1.4 | Erosion of natural deposits; Water additive which promotes strong teeth |
| Chlorine | PPM | 4.0 | 4.0 | 1.7 | 0.8 – 2.7 | Water additive used to control microbes |
| Total Trihalomethanes May 2008 | PPB | NA | 80 | 12.8 | 11.5 – 14.2 | By-product of drinking water chlorination |
| Total Haloacetic Acids May 2008 | PPB | NA | 60 | 5.3 | 4.3 – 6.3 | By-product of drinking water chlorination |

1- Reported Level is the average in 2009.

2- Range shows highest and lowest reported test values. Range is only reported if two or more samples were tested.

BACTERIOLOGICAL TESTING TABLE

| Parameter | Unit | MCLG | MCL | Level Found | Notes ₁ |
|-------------------------|------------|------|---------------------------------|-------------|--|
| Total Coliform | % Positive | 0 | 1 positive monthly sample/month | 0 | 0 positive samples out of 12 samples tested. Minimum sampling frequency is 1 sample per month. |
| E. coli Bacteria | % Positive | 0 | 1 positive monthly sample/month | 0 | 0 positive samples out of 12 samples tested. Minimum sampling frequency is 1 sample per month. |

1 - Bacteriological samples are collected from sites on the distribution system.

CLOVERHILL III WATER QUALITY INFORMATION 2009

PWSID 0100031

Your water source came from two (2) deep wells located in the Cloverhill III Development. These wells withdraw water from the New Oxford Formation. The Maryland Department of the Environment (MDE) completed the Source Water Assessment for the Cloverhill III community water supply in 2002. Should you care to obtain a copy of this report, the Frederick County Library has a copy, MDE has several, and the Division of Utilities & Solid Waste Management has placed a copy on the Frederick County website. MDE has determined that the Cloverhill III water supply is susceptible to nitrate and some microbiological contaminants. This water supply is not susceptible to other inorganic compounds, radiological contaminants, volatile organic compounds, synthetic organic compounds, and surface water microorganisms.

REGULATED CONTAMINANTS DETECTED

Cloverhill III Water Treatment Plant

| Parameter | Units | MCLG | MCL | Reported Level ₁ | Range ₂ | Typical Sources for Detected Contaminants |
|----------------------------------|-------|------|-----|-----------------------------|--------------------|---|
| Barium July 2007 | PPM | 2 | 2 | 0.296 | | Erosion of natural deposits; Discharge of drilling wastes; Discharge from metal refineries |
| Chromium July 2007 | PPB | 100 | 100 | 0.6 | | Discharge from steel and pulp mills; Erosion of natural deposits |
| Fluoride July 2007 | PPM | 4 | 4 | 0.96 | | Erosion of natural deposits; Water additive which promotes strong teeth |
| Mercury July 2007 | PPB | 2 | 2 | 0.3 | | Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills; Runoff from cropland |
| Nitrate September 2009 | PPM | 10 | 10 | 5.7 | 4.2 - 5.7 | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits |

1- Reported Level is the most recent value reported to MDE.

2- Range shows highest and lowest reported test values. Range is only reported if two or more samples were tested.

Note: Nitrate average for calendar year 2009 was 5.0 ppm based upon 51 samples.

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six (6) months of age. High nitrate levels in drinking water can cause Blue Baby Syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider.

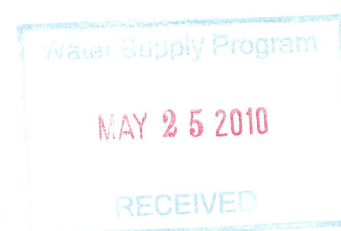
UNREGULATED CONTAMINANTS DETECTED

Cloverhill III Water Treatment Plant

| Parameter | Units | MCLG | MCL | Reported Level ₁ | Sample Date | Range ₂ | Typical Sources for Detected Contaminants |
|----------------|-------|------|------|-----------------------------|-------------|--------------------|---|
| Sodium | PPM | None | None | 20.8 | July 2007 | | Erosion of natural deposits |
| Sulfate | PPM | None | None | 15.5 | July 2007 | | Erosion of natural deposits |

1- Reported Level is the most recent value reported to MDE.

2- Range shows highest and lowest reported test values. Range is only reported if two or more samples were tested.



LEAD AND COPPER RULE

Customer Tap

| Parameter | Units | MCLG | AL | Reported Level ₁ | Range ₂ | Sites Over Action Limit | Typical Sources for Detected Contaminants |
|--------------------|-------|------|-----|-----------------------------|--------------------|-------------------------|--|
| Lead 2008 | PPB | 0 | 15 | 2 | ND – 9 | 0 | Corrosion of household plumbing systems; erosion of natural deposits |
| Copper 2008 | PPM | 1.3 | 1.3 | 1.17 | 0.348 – 1.32 | 1 | Corrosion of household plumbing systems; erosion of natural deposits |

1- Reported Level is 90th percentile value.

2- Range is only reported if two or more samples were tested.

REGULATED CONTAMINANTS DETECTED

Cloverhill III Distribution System

| Parameter | Units | MCLG | MCL | Reported Level ₁ | Range ₂ | Typical Sources for Detected Contaminants |
|---|-------|------|-----|-----------------------------|--------------------|---|
| Fluoride | PPM | 4 | 4 | 1.0 | 0.5 - 1.4 | Erosion of natural deposits; Water additive which promotes strong teeth |
| Chlorine | PPM | 4.0 | 4.0 | 1.8 | 0.7 – 3.0 | Water additive used to control microbes |
| Total Haloacetic Acids September 2007 | PPB | NA | 60 | 8.13 | | By-product of drinking water chlorination |
| Total Trihalomethanes September 2007 | PPB | NA | 80 | 20.2 | | By-product of drinking water chlorination |

1- Annual Average for 2009.

2- Range shows highest and lowest reported test values. Range is only reported if two or more samples were tested.

BACTERIOLOGICAL TESTING TABLE

| Parameter | Unit | MCLG | MCL | Level Found | Notes ₁ |
|-------------------------|------------|------|---------------------------------|-------------|--|
| Total Coliform | % Positive | 0 | 1 positive monthly sample/month | 0 | 0 positive samples out of 13 samples tested. Minimum sampling frequency is 1 samples per month |
| E. coli Bacteria | % Positive | 0 | 1 positive monthly sample/month | 0 | 0 positive samples out of 13 samples tested. Minimum sampling frequency is 1 samples per month |

1 - Bacteriological samples are collected from sites on the distribution system.

COPPERFIELD WATER QUALITY INFORMATION 2009

PWSID 0100037

Your water source came from two (2) deep wells located in the Copperfield area. These wells withdraw water from the Catoclin Metabasalt Formation. The Maryland Department of the Environment (MDE) completed the Source Water Assessment for the Copperfield community water supply in 2002. Should you care to obtain a copy of this report, the Frederick County Library has a copy, MDE has several, and the Division of Utilities & Solid Waste Management has placed a copy on the Frederick County website. MDE has determined that the Copperfield water supply is susceptible to some microbiological contaminants. This water supply is not susceptible to inorganic compounds, radiological contaminants, volatile organic compounds, synthetic organic compounds, and surface water microorganisms.

REGULATED CONTAMINANTS

Copperfield Water Treatment Plant

| Parameter | Units | MCLG | MCL | Reported Level ₁ | Range ₂ | Typical Sources for Detected Contaminants |
|---|-------|------|-----|-----------------------------|--------------------|---|
| Alpha Radionuclides September 2009 | pCi/l | 0 | 15 | 2 | | Erosion of natural deposits |
| Barium July 2007 | PPM | 2 | 2 | 0.126 | | Erosion of natural deposits; Discharge of drilling wastes; Discharge from metal refineries |
| Beta Radionuclides₃ September 2009 | pCi/l | 0 | 50 | 7 | | Decay of natural and man-made deposits |
| Combined Radium September 2009 | pCi/l | N/A | 5 | 0.8 | | Erosion of natural deposits |
| Fluoride July 2007 | PPM | 4 | 4 | 0.20 | | Erosion of natural deposits; Water additive which promotes strong teeth |
| Mercury July 2007 | PPB | 2 | 2 | 0.4 | | Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills; Runoff from cropland |

1 - Reported Level is the most recent value reported to MDE

2 - Range shows highest and lowest reported test values. Range is only reported if two or more samples were tested.

3 - EPA considers 50 pCi/l to be the level of concern for beta particles.

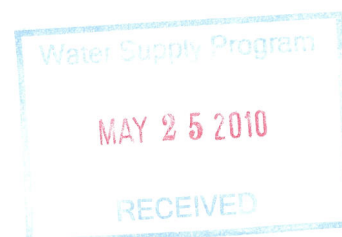
UNREGULATED CONTAMINANTS DETECTED

Copperfield Water Treatment Plant

| Parameter | Units | MCLG | MCL | Reported Level ₁ | Range ₂ | Sample Date | Typical Sources for Detected Contaminants |
|----------------|-------|------|------|-----------------------------|--------------------|-------------|---|
| Iron | PPM | None | None | 0.040 | ND - 0.547 | 2009 | Erosion of natural deposits |
| Sodium | PPM | None | None | 45.2 | | July 2007 | Erosion of natural deposits |
| Sulfate | PPM | None | None | 28.3 | | July 2007 | Erosion of natural deposits |

1- Reported Level is the most recent value reported to MDE.

2- Range shows highest and lowest reported test values. Range is only reported if two or more samples were tested.



LEAD AND COPPER RULE

Customer Tap

| Parameter | Units | MCLG | AL | Reported Level ₁ | Range ₂ | Sites Over Action Limit | Typical Sources for Detected Contaminants |
|--------------------|-------|------|-----|-----------------------------|--------------------|-------------------------|--|
| Lead 2008 | PPB | 0 | 15 | 1 | ND – 1 | 0 | Corrosion of household plumbing systems; erosion of natural deposits |
| Copper 2008 | PPM | 1.3 | 1.3 | 0.367 | 0.184 - 0.383 | 0 | Corrosion of household plumbing systems; erosion of natural deposits |

1- Reported Level is 90th percentile value.

2- Range is only reported if two or more samples were tested.

REGULATED CONTAMINANTS DETECTED

Copperfield Distribution System

| Parameter | Units | MCLG | MCL | Reported Level ₁ | Range ₂ | Typical Sources for Detected Contaminants |
|--|-------|------|-----|-----------------------------|--------------------|---|
| Chlorine | PPM | 4.0 | 4.0 | 1.7 | 0.8 – 2.7 | Water additive used to control microbes |
| Total Trihalomethanes May 2008 | PPB | NA | 80 | 15.49 | | By-product of drinking water chlorination |
| Total Haloacetic Acids May 2008 | PPB | NA | 60 | 5.07 | | By-product of drinking water chlorination |

1- Reported Level is the average for 2009.

2- Range shows highest and lowest reported test values. Range is only reported if two or more samples were tested.

BACTERIOLOGICAL TESTING TABLE

| Parameter | Unit | MCLG | MCL | Level Found | Notes ₁ |
|-------------------------|------------|------|---------------------------------|-------------|---|
| Total Coliform | % Positive | 0 | 1 positive monthly sample/month | 0 | 0 positive samples out of 12 samples tested. Minimum sampling frequency is 1 sample per month |
| E. coli Bacteria | % Positive | 0 | 1 positive monthly sample/month | 0 | 0 positive samples out of 12 samples tested. Minimum sampling frequency is 1 sample per month |

1 - Bacteriological samples are collected from sites on the distribution system.

To date, fluoride is not being added to your water supply. Please consult your dentist regarding this matter. Until we purchase and install the necessary equipment, fluoride will not be added. We will notify you in advance of the date when fluoridation of your water supply will begin.

FOUNTAINDALE WATER QUALITY INFORMATION 2009

PWSID 0100013

Your water source came from six (6) deep wells located in the Fountaindale Development. These wells withdraw water from the Catoctin Metabasalt Formation. Wells 7 and 8 are only used in emergencies and were not operated in calendar year 2009. The Maryland Department of the Environment (MDE) completed the Source Water Assessment for the Fountaindale community water supply in 2002. Should you care to obtain a copy of this report, the Frederick County Library has a copy, MDE has several, and the Division of Utilities & Solid Waste Management has placed a copy on the Frederick County website. MDE has determined that the Fountaindale water supply is susceptible to contamination by volatile organic compounds and microbiological contaminants. This water supply is not susceptible to contamination by inorganic compounds, radionuclides, or synthetic organic compounds.

REGULATED CONTAMINANTS DETECTED

Fountaindale Water Treatment Plant

| Parameter | Units | MCLG | MCL | Reported Level ₁ | Range ₂ | Typical Sources for Detected Contaminants |
|---|-------|------|------------------------------|-----------------------------|--------------------|---|
| Alpha Radionuclides August 2007 | pCi/L | 0 | 15 | 2 | | Erosion of natural deposits |
| Barium April 2008 | PPM | 2 | 2 | 0.056 | | Erosion of natural deposits; Discharge of drilling wastes; Discharge from metal refineries |
| Di (2-ethylhexyl) phthalate June 2005 | PPB | 0 | 6 | 0.7 | | Discharge from rubber and chemical factories |
| Beta Radionuclides August 2007 | pCi/L | 0 | 50 | 5 | | Decay of natural and man-made deposits |
| Combined Radium August 2007 | pCi/L | 0 | 5 | 0.2 | | Erosion of natural deposits |
| Nitrate November 2009 | PPM | 10 | 10 | 2.1 | 1.9 – 2.1 | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits |
| Nitrite March 2007 | PPM | 1 | 1 | 0.005 | | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits |
| (TT) Turbidity | NTU | 0 | < 0.3 NTU 95% of the time | 100% | | Soil Runoff |
| Turbidity | NTU | 0 | 1 NTU Max | 0.28 | 0.02 – 0.28 | Soil Runoff |

1- Reported Level is the most recent value reported to MDE. Turbidity was the maximum value for the year.

2- Range shows highest and lowest reported test values and only reported if two or more samples were tested.

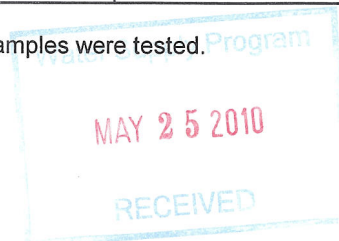
UNREGULATED CONTAMINANTS DETECTED

Fountaindale Water Treatment Plant

| Parameter | Units | MCLG | MCL | Reported Level ₁ | Sample Date | Range ₂ | Typical Sources for Detected Contaminants |
|----------------|-------|------|------|-----------------------------|-------------|--------------------|---|
| Sodium | PPM | None | None | 16.4 | April 2008 | | Erosion of natural deposits |
| Sulfate | PPM | None | None | 28.5 | April 2008 | | Erosion of natural deposits |

1- Reported Level is the most recent value reported to MDE.

2- Range shows highest and lowest reported test values. Range is only reported if two or more samples were tested.



LEAD AND COPPER RULE

Customer Tap

| Parameter | Units | MCLG | AL | Reported Level ₁ | Range ₂ | Sites Over Action Limit | Typical Sources for Detected Contaminants |
|--------------------|-------|------|-----|-----------------------------|--------------------|-------------------------|--|
| Lead 2008 | PPB | 0 | 15 | 2 | ND – 4 | 0 | Corrosion of household plumbing systems; erosion of natural deposits |
| Copper 2008 | PPM | 1.3 | 1.3 | 0.168 | ND - 0.176 | 0 | Corrosion of household plumbing systems; erosion of natural deposits |

1 - Reported Level is 90th percentile value.

2 - Range is only reported if two or more samples were tested.

TABLE of TEST RESULTS - REGULATED CONTAMINANTS DETECTED

Fountaindale Distribution System

| Parameter | Units | MCLG | MCL | Reported Level ₁ | Range ₂ | Typical Sources for Detected Contaminants |
|------------------------------------|-------|------|-----|-----------------------------|--------------------|---|
| Total Trihalomethanes 2009 | PPB | NA | 80 | 38.2 ₃ | 9.4 – 69.9 | By-product of drinking water chlorination |
| Total Haloacetic Acids 2009 | PPB | NA | 60 | 13.2 ₃ | 4.7 – 22.8 | By-product of drinking water chlorination |
| Chlorine | PPM | 4.0 | 4.0 | 1.8 | 1.2 – 2.4 | Water additive used to control microbes |

1- Reported Level is the most recent value reported to MDE or in the case of Chlorine, the annual average for 2009.

2- Range shows highest and lowest reported test values and is only reported if two or more samples were tested.

3- Maximum rolling annual average reported in 2009.

BACTERIOLOGICAL TESTING TABLE

| Parameter | Unit | MCLG | MCL | Level Found | Notes ₁ |
|-------------------------|------------|------|---------------------------------|-------------|--|
| Total Coliform | % Positive | 0 | 1 positive monthly sample/month | 0 | 0 positive samples out of 36 samples tested. Minimum sampling frequency is 3 samples per month |
| E. coli Bacteria | % Positive | 0 | 1 positive monthly sample/month | 0 | 0 positive samples out of 36 samples tested. Minimum sampling frequency is 3 samples per month |

1 - Bacteriological samples are collected from sites on the distribution system.

To date, fluoride is not being added to your water supply. Please consult your dentist regarding this matter. We will provide you with advance notice of the date when fluoridation of your water supply will begin.

LIBERTYTOWN APARTMENTS WATER QUALITY INFORMATION 2009

PWSID 0100036

Your water source came from two (2) deep wells located in the Libertytown Apartments area. These wells withdraw water from the Libertytown Metarhyolite Formation. The Maryland Department of the Environment (MDE) has completed the Source Water Assessment for the Libertytown Apartments community water supply. Should you care to obtain a copy of this report, the Frederick County Library has a copy, MDE has several, and the Division of Utilities & Solid Waste Management has placed a copy on the Frederick County website. MDE has determined that your water supply is susceptible to contamination by nitrate, radon, volatile organic compounds, and viruses. It is not considered susceptible to synthetic organic compounds. Improvements to the construction of the two wells has made them not susceptible to surface water microorganisms.

REGULATED CONTAMINANTS DETECTED

Libertytown Apartments Water Treatment Plant

| Parameter | Units | MCLG | MCL | Reported Level ₁ | Range ₂ | Typical Sources for Detected Contaminants |
|---|-------|------|-----|-----------------------------|--------------------|---|
| Atrazine May 2009 | PPB | 3 | 3 | 0.11 | | Runoff from herbicide used on row crops |
| Barium April 2009 | PPM | 2 | 2 | 0.079 | | Erosion of Natural Deposits; Discharge of drilling wastes; Discharge from metal refineries |
| Di (2-ethylhexyl) phthalate June 2005 | PPB | 0 | 6 | 0.9 | | Discharge from rubber and chemical factories |
| Nitrate October 2009 | PPM | 10 | 10 | 6.4 | 6.3 – 6.8 | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits |

1- Reported Level is the most recent value reported to MDE.

2- Range shows highest and lowest reported test value. Range is only reported if two or more samples were tested.

Note: Nitrate average for calendar year 2009 was 6.6 ppm based upon 4 samples.

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six (6) months of age. High nitrate levels in drinking water can cause Blue Baby Syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider.

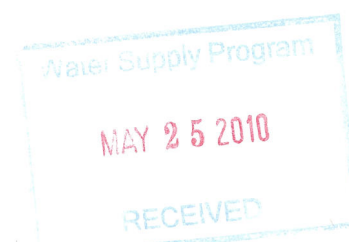
UNREGULATED CONTAMINANTS DETECTED

Libertytown Apartments Water Treatment Plant

| Parameter | Units | MCLG | MCL | Reported Level ₁ | Range ₂ | Sample Date | Typical Sources for Detected Contaminants |
|----------------|-------|------|------|-----------------------------|--------------------|----------------|---|
| Sodium | PPM | None | None | 59.4 | | September 2009 | Erosion of natural deposits |
| Sulfate | PPM | None | None | 8.0 | | April 2009 | Erosion of natural deposits |

1- Reported Level is the most recent value reported to MDE.

2- Range shows highest and lowest reported test values. Range is only reported if two or more samples were tested.



LEAD AND COPPER RULE**Customer Tap**

| Parameter | Units | MCLG | AL | Reported Level ₁ | Range ₂ | Sites Over Action Limit | Typical Sources for Detected Contaminants |
|--------------------|-------|------|-----|-----------------------------|--------------------|-------------------------|--|
| Lead 2008 | PPB | 0 | 15 | 3 | 1 – 3 | 0 | Corrosion of household plumbing systems; erosion of natural deposits |
| Copper 2008 | PPM | 1.3 | 1.3 | 0.407 | 0.150 - 0.578 | 0 | Corrosion of household plumbing systems; erosion of natural deposits |

1- Reported Level is 90th percentile value.

2 - Range is only reported if two or more samples were tested.

REGULATED CONTAMINANTS DETECTED**Libertytown Apartments Distribution System**

| Parameter | Units | MCLG | MCL | Reported Level ₁ | Range ₂ | Typical Sources for Detected Contaminants |
|-----------------|-------|------|-----|-----------------------------|--------------------|---|
| Chlorine | PPM | 4.0 | 4.0 | 1.4 | 0.2 – 3.0 | Water additive used to control microbes |

1- Reported Level is the annual average in 2009.

2- Range shows highest and lowest reported test values. Range is only reported if two or more samples were tested.

BACTERIOLOGICAL TESTING TABLE

| Parameter | Unit | MCLG | MCL | Level Found | Notes ₁ |
|-------------------------|------------|------|---------------------------------|-------------|---|
| Total Coliform | % Positive | 0 | 1 positive monthly sample/month | 0 | 0 positive samples out of 12 samples tested. Minimum sampling frequency is 1 sample per month |
| E. coli Bacteria | % Positive | 0 | 1 positive monthly sample/month | 0 | 0 positive samples out of 12 samples tested. Minimum sampling frequency is 1 sample per month |

1 - Bacteriological samples are collected from sites on the distribution system.

To date, fluoride is not being added to your water supply. Please consult your dentist regarding this matter. Until we purchase and install the necessary equipment, fluoride will not be added. We will provide you with advance notice of the date when fluoridation of your water supply will begin.

LIBERTYTOWN EAST WATER QUALITY INFORMATION 2009

PWSID 0100038

Your water source came from two (2) deep wells located in the Libertytown East Development. These wells withdraw water from the Ijamsville Formation and Wakefield Marble. The Maryland Department of the Environment (MDE) completed the Source Water Assessment for the Libertytown East community water supply in 2002. Should you care to obtain a copy of this report, the Frederick County Library has a copy, MDE has several, and the Division of Utilities & Solid Waste Management has placed a copy on the Frederick County website. MDE has determined that the Libertytown East water supply is susceptible to some microbiological contaminants. This water supply is not susceptible to inorganic compounds, radiological contaminants, volatile organic compounds, synthetic organic compounds, and surface water microorganisms.

REGULATED CONTAMINANTS DETECTED**Libertytown East Water Treatment Plant**

| Parameter | Units | MCLG | MCL | Reported Level ₁ | Range ₂ | Typical Sources for Detected Contaminants |
|---|-------|------|-----|-----------------------------|--------------------|---|
| Alpha Radionuclides January 2008 | pCi/l | N/A | 15 | 1 | | Erosion of natural deposits |
| Barium April 2008 | PPM | 2 | 2 | 0.083 | | Erosion of natural deposits; Discharge of drilling wastes; Discharge from metal refineries |
| Combined Radium January 2008 | pCi/l | N/A | 5 | 0.2 | | Erosion of natural deposits |
| Di (2-ethylhexyl) phthalate August 2006 | PPB | 0 | 6 | 1 | | Discharge from rubber and chemical factories |
| Fluoride August 2008 | PPM | 4 | 4 | 0.1 | | Erosion of natural deposits; Water additive which promotes strong teeth |
| Nitrate February 2009 | PPM | 10 | 10 | 3.4 | | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |
| Total Trihalomethanes June 2005 | PPB | NA | 80 | 2.1 | | By-product of drinking water chlorination |

1- Reported Level is the most recent value reported to MDE.

2- Range shows highest and lowest reported test values. Range is only reported if two or more samples were tested.

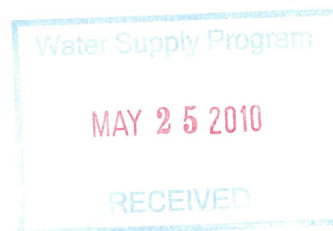
UNREGULATED CONTAMINANTS DETECTED**Libertytown East Water Treatment Plant**

| Parameter | Units | MCLG | MCL | Reported Level ₁ | Range ₂ | Sample Date | Typical Sources for Detected Contaminants |
|----------------|-------|------|------|-----------------------------|--------------------|-------------|---|
| Sodium | PPM | None | None | 36.3 | 26 – 36.3 | April 2008 | Erosion of natural deposits |
| Sulfate | PPM | None | None | 23.2 | | April 2008 | Erosion of natural deposits |

1- Reported Level is the most recent value reported to MDE.

2- Range shows highest and lowest reported test values. Range is only reported if two or more samples were tested.

To date, fluoride is not being added to your water supply. Please consult your dentist regarding this matter. Until we purchase and install the necessary equipment, fluoride will not be added. We will provide you with advance notice as to the date fluoride addition will start.



LEAD AND COPPER RULE**Customer Tap**

| Parameter | Units | MCLG | AL | Reported Level ₁ | Range ₂ | Sites Over Action Limit | Typical Sources for Detected Contaminants |
|--------------------|-------|------|-----|-----------------------------|--------------------|-------------------------|--|
| Lead 2008 | PPB | 0 | 15 | 8 | 2 - 11 | 0 | Corrosion of household plumbing systems; erosion of natural deposits |
| Copper 2008 | PPM | 1.3 | 1.3 | 0.207 | 0.065 - 0.215 | 0 | Corrosion of household plumbing systems; erosion of natural deposits |

1 - Reported Level is 90th percentile value.

2 - Range is only reported if two or more samples were tested.

REGULATED CONTAMINANTS DETECTED**Libertytown East Distribution System**

| Parameter | Units | MCLG | MCL | Reported Level ₁ | Range ₂ | Typical Sources for Detected Contaminants |
|--|-------|------|-----|-----------------------------|--------------------|---|
| Chlorine | PPM | 4.0 | 4.0 | 1.5 | 0.6 - 3.8 | Water additive used to control microbes |
| Total Trihalomethanes August 2007 | PPB | NA | 80 | 23.5 | | By-product of drinking water chlorination |
| Total Haloacetic Acids August 2007 | PPB | NA | 60 | 8.8 | | By-product of drinking water chlorination |

1- Reported Level is the annual average for 2009.

2- Range shows highest and lowest reported test values. Range is only reported if two or more samples were tested.

BACTERIOLOGICAL TESTING TABLE

| Parameter | Unit | MCLG | MCL | Level Found | Notes ₁ |
|-------------------------|------------|------|---------------------------------|-------------|---|
| Total Coliform | % Positive | 0 | 1 positive monthly sample/month | 0 | 0 positive samples out of 12 samples tested. Minimum sampling frequency is 1 sample per month |
| E. coli Bacteria | % Positive | 0 | 1 positive monthly sample/month | 0 | 0 positive samples out of 12 samples tested. Minimum sampling frequency is 1 sample per month |

1 - Bacteriological samples are collected from sites on the distribution system.

Your primary drinking water source is the Potomac River, a surface water supply. Some residents in the New Market area may receive a portion of their drinking water from the Woodspring Water Treatment plant which utilizes groundwater sources. The Maryland Department of the Environment (MDE) completed the Source Water Assessment for the New Design Road Water Treatment Plant in 2002. Should you care to obtain a copy of this report, the Frederick County Library has a copy, MDE has several, and the Division of Utilities & Solid Waste Management has placed a copy on the Frederick County website. MDE has identified drinking water contaminants of concern found in the Potomac River as natural organic matter and disinfection by-products precursors, *Cryptosporidium* oocysts and *Giardia* cysts, taste and odor causing compounds, ammonia, sediment/turbidity, algae, fecal coliform and dieldrin.

REGULATED CONTAMINANTS DETECTED

New Design Road Water Treatment Plant

| Parameter | Units | MCLG | MCL | Reported Level ₁ | Range ₂ | Typical Sources for Detected Contaminants |
|--|-------|------|---------------------------|-----------------------------|--------------------|---|
| Barium April 2009 | PPM | 2 | 2 | 0.057 | | Erosion of natural deposits; Discharge of drilling wastes; Discharge from metal refineries |
| Beta Radionuclides₃ June 2009 | pCi/l | 0 | 50 | 2 | | Decay of natural and man-made deposits |
| Di (2-ethylhexyl) phthalate September 2008 | PPB | 0 | 6 | 0.8 | | Discharge from rubber and chemical factories |
| Nitrate April 2009 | PPM | 10 | 10 | 0.9 | | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits |
| Fluoride April 2009 | PPM | 4 | 4 | 0.9 | 0.4 – 1.6 | Water additive which promotes strong teeth |
| Turbidity | NTU | 0 | 1 NTU max | 0.06 | 0.03 – 0.15 | Soil runoff |
| (TT) Turbidity | NTU | 0 | < 0.3 NTU 95% of the time | 100% | | Soil runoff |
| (TT) Removal of Total Organic Carbon | % | NA | NA | 46% | 29 - 63 | Naturally present in the environment, Indicator of trihalomethanes and other disinfection by-product precursors |

Woodspring Water Treatment Plant

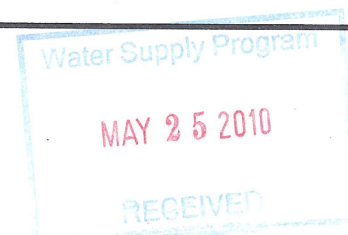
| | | | | | | |
|--|-----|----|----|-----|-----------|---|
| Di (2-ethylhexyl) phthalate September 2008 | PPB | 0 | 6 | 0.6 | | Discharge from rubber and chemical factories |
| Nitrate February 2009 | PPM | 10 | 10 | 5.9 | 5.5 - 5.9 | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits |

1- Reported Level is the most recent value reported to MDE.

2- Range shows highest and lowest reported test values. Range is only reported if two or more samples were tested.

3- EPA considers 50 pCi/l to be the level of concern for beta particles.

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six (6) months of age. High nitrate levels in drinking water can cause Blue Baby Syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider.



UNREGULATED CONTAMINANTS DETECTED

New Design Road Water Treatment Plant

| Parameter | Units | MCLG | MCL | Reported Level ₁ | Sample Date | Range ₂ | Typical Sources for Detected Contaminants |
|----------------|-------|------|------|-----------------------------|-------------|--------------------|---|
| Sulfate | PPM | None | None | 50.5 | April 2009 | | Erosion of natural deposits |
| Sodium | PPM | None | None | 23.6 | April 2009 | | Erosion of natural deposits |

1- Reported Level is the most recent value reported to MDE.

2- Range shows highest and lowest reported test values. Range is only reported if two or more samples were tested.

LEAD AND COPPER RULE

Customer Tap

| Parameter | Units | MCLG | AL | Reported Level ₁ | Range ₂ | Sites Over Action Limit | Typical Sources for Detected Contaminants |
|--------------------|-------|------|-----|-----------------------------|--------------------|-------------------------|--|
| Lead 2009 | PPB | 0 | 15 | ND (< 5) | < 5 - < 5 | 0 | Corrosion of household plumbing systems; erosion of natural deposits |
| Copper 2009 | PPM | 1.3 | 1.3 | 0.251 | ND - 0.279 | 0 | Corrosion of household plumbing systems; erosion of natural deposits |

1 - Reported Level is 90th percentile value.

2 - Range is only reported if two or more samples were tested.

REGULATED CONTAMINANTS DETECTED

New Design Road Water Distribution System

| Parameter | Units | MCLG | MCL | Reported Level ₁ | Range ₂ | Typical Sources for Detected Contaminants |
|-------------------------------|-------|------|-----------------|-----------------------------|--------------------|---|
| Total Trihalomethanes | PPB | NA | 80 ₄ | 64.0 ₃ | 16.8 - 107 | By-product of drinking water chlorination |
| Total Haloacetic Acids | PPB | NA | 60 ₄ | 39.6 ₃ | 12.0 - 39.4 | By-product of drinking water chlorination |
| Chlorine | PPM | 4.0 | 4.0 | 1.1 | 0.2 - 2.6 | Water additive used to control microbes |

1- Reported Level is the annual average for calendar year 2009.

2- Range shows highest and lowest reported test values. Range is only reported if two or more samples were tested.

3- This value is the highest annual rolling average in 2009.

4- Compliance is based on a system-wide rolling annual average.

BACTERIOLOGICAL TESTING TABLE

| Parameter | Unit | MCLG | MCL | Level Found | Notes ₁ |
|-------------------------|------------|------|-------------------------|-------------|---|
| Total Coliform | % Positive | 0 | 1 positive sample/month | 0.33 % | 2 positive samples out of 609 samples tested all year. Minimum sampling frequency is 40 samples per month |
| E. coli Bacteria | % Positive | 0 | 1 positive sample/month | 0 | 0 positive samples out of 609 samples tested. Minimum sampling frequency is 40 samples per month |

1 - Bacteriological samples are collected from sites on the distribution system.

The New Design system was assessed a monitoring violation by the Maryland Department of Environment for the monitoring period July - September 2009. The parameter chlordane, one of twenty parameters run by EPA Method 525, was omitted from a synthetic organic compound analysis our contract laboratory was hired to perform. Unfortunately, this omission became apparent after the monitoring period had concluded and arrangements were made to immediately resample. Follow up testing conducted on October 29, 2009 showed chlordane concentrations below the reportable limit of 0.50 ppb.

SAM HILL WATER QUALITY INFORMATION 2009

PWSID 0100040

Your water source came from five (5) deep wells located in the Sam Hill Development. These wells withdraw water from the Ijamsville Formation. The Maryland Department of the Environment (MDE) completed the Source Water Assessment for the Sam Hill community water supply in 2002. Should you care to obtain a copy of this report, the Frederick County Library has a copy, MDE has several, and the Division of Utilities & Solid Waste Management has placed a copy on the Frederick County website. MDE has determined that the Sam Hill water supply is susceptible to nitrate, some microbiological contaminants, and possibly radon. This water supply is not susceptible to other inorganic compounds, other radiological contaminants, volatile organic compounds, and synthetic organic compounds.

REGULATED CONTAMINANTS DETECTED

Sam Hill Water Treatment Plant

| Parameter | Units | MCLG | MCL | Reported Level ₁ | Range ₂ | Typical Sources for Detected Contaminants |
|-------------------------------|-------|------|-----|-----------------------------|--------------------|---|
| Barium April 2008 | PPM | 2 | 2 | 0.019 | | Erosion of natural deposits; Discharge of drilling wastes; Discharge from metal refineries |
| Fluoride April 2008 | PPM | 4 | 4 | 0.86 | | Erosion of natural deposits; Water additive which promotes strong teeth |
| Nitrate May 2009 | PPM | 10 | 10 | 7.3 | 5.0 – 7.4 | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits |

1- Reported Level is the most recent value reported to MDE.

2- Range shows highest and lowest reported test values. Range is only reported if two or more samples were tested.

Note: Nitrate average for calendar year 2009 was 6.5 ppm based upon 52 samples.

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six (6) months of age. High nitrate levels in drinking water can cause Blue Baby Syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider.

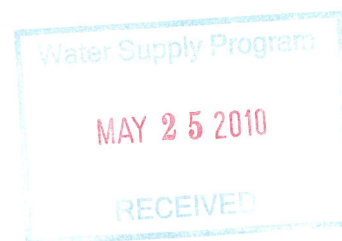
UNREGULATED CONTAMINANTS DETECTED

Sam Hill Water Treatment Plant

| Parameter | Units | MCLG | MCL | Reported Level ₁ | Range ₂ | Typical Sources for Detected Contaminants |
|-----------------------------|-------|------|------|-----------------------------|--------------------|---|
| Sodium April 2008 | PPM | None | None | 84.3 | | Erosion of natural deposits |

1- Reported Level is the most recent value reported to MDE.

2- Range shows highest and lowest reported test values. Range is only reported if two or more samples were tested.



LEAD AND COPPER RULE**Customer Tap**

| Parameter | Units | MCLG | AL | Reported Level ₁ | Range ₂ | Sites Over Action Limit | Typical Sources for Detected Contaminants |
|--------------------|-------|------|-----|-----------------------------|--------------------|-------------------------|--|
| Lead 2008 | PPB | 0 | 15 | 2 | 1 – 9 | 0 | Corrosion of household plumbing systems; erosion of natural deposits |
| Copper 2008 | PPM | 1.3 | 1.3 | 0.891 | 0.050 - 1.13 | 0 | Corrosion of household plumbing systems; erosion of natural deposits |

1 - Reported Level is 90th percentile value.

2 - Range is only reported if two or more samples were tested.

REGULATED CONTAMINANTS DETECTED**Sam Hill Water Distribution System**

| Parameter | Units | MCLG | MCL | Reported Level ₁ | Range ₂ | Typical Sources for Detected Contaminants |
|---|-------|------|-----|-----------------------------|--------------------|---|
| Fluoride | PPM | 4 | 4 | 1.0 | 0.6 - 1.4 | Erosion of natural deposits; Water additive which promotes strong teeth |
| Chlorine | PPM | 4.0 | 4.0 | 1.6 | 0.6 - 2.4 | Water additive used to control microbes |
| Total Trihalomethanes August 2007 | PPB | NA | 80 | 13.1 | | By-product of drinking water chlorination |
| Total Haloacetic Acids August 2007 | PPB | NA | 60 | 3.3 | | By-product of drinking water chlorination |

1- Reported Level is the annual average for 2009.

2- Range shows highest and lowest reported test values. Range is only reported if two or more samples were tested.

BACTERIOLOGICAL TESTING TABLE

| Parameter | Unit | MCLG | MCL | Level Found | Notes ₁ |
|-------------------------|------------|------|---------------------------------|-------------|--|
| Total Coliform | % Positive | 0 | 1 positive monthly sample/month | 0 | 0 positive samples out of 24 samples tested. Minimum sampling frequency is 2 samples per month |
| E. coli Bacteria | % Positive | 0 | 1 positive monthly sample/month | 0 | 0 positive samples out of 24 samples tested. Minimum sampling frequency is 2 samples per month |

1 - Bacteriological samples are collected from sites on the distribution system.

During calendar year 2009, your water was supplied through the City of Frederick's water distribution system from the County's New Design Road water system. However, because of the distances involved, the majority of your water is comprised of three (3) separate surface water sources used by the City of Frederick.

REGULATED CONTAMINANTS DETECTED

Data from samples collected at Frederick City Water Treatment Plants

| Parameter | Units | MCLG | MCL | Plant | Reported Level ₁ | Range ₂ | Typical Sources of Detected Contaminants |
|----------------------------|-------|------|---------------------------|---------------|-----------------------------|--------------------|---|
| Fluoride | PPM | 4 | 4 | Monocacy | 1.0 | | Erosion of natural deposits, Water additive which promotes strong teeth |
| | | | | Linganore | 1.0 | | |
| | | | | Fishing Creek | 0.9 | | |
| Nitrate | PPM | 10 | 10 | Monocacy | 2.0 | | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits |
| | | | | Linganore | 1.7 | | |
| | | | | Fishing Creek | < 0.1 | | |
| Barium | PPM | 2 | 2 | Monocacy | 0.03 | | Erosion of natural deposits; Discharge of drilling wastes; Discharge from metal refineries |
| | | | | Linganore | 0.04 | | |
| | | | | Fishing Creek | 0.03 | | |
| Atrazine | PPB | 3 | 3 | Monocacy | < 0.5 | | Runoff from herbicide used on row crops |
| | | | | Linganore | 0.2 | | |
| | | | | Fishing Creek | < 0.5 | | |
| Turbidity Max Value | NTU | 0 | 1 NTU Max | Monocacy | 0.27 | | Soil runoff |
| | | | | Linganore | 0.30 | | |
| | | | | Fishing Creek | 0.25 | | |
| Turbidity (TT) | % | 0 | < 0.3 NTU 95% of the time | Monocacy | 100 | | Soil runoff |
| | | | | Linganore | 100 | | |
| | | | | Fishing Creek | 100 | | |

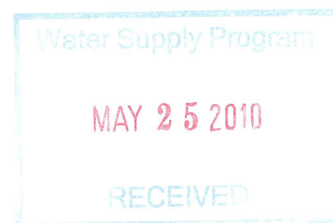
1 - Reported Level can be maximum or average values depending on regulatory requirements.

2 - Range shows highest and lowest reported test values. Range is only reported if two or more samples were tested.

BACTERIOLOGICAL TESTING TABLE

| Parameter | Unit | MCLG | MCL | Level Found | Notes ₁ |
|-------------------------|------------|------|---------------------------------|-------------|--|
| Total Coliform | % Positive | 0 | 1 positive monthly sample/month | 0 | 0 positive samples out of 24 samples tested. Minimum sampling frequency is 2 samples per month |
| E. coli Bacteria | % Positive | 0 | 1 positive monthly sample/month | 0 | 0 positive samples out of 24 samples tested. Minimum sampling frequency is 2 samples per month |

1 - Bacteriological samples are collected from sites on the distribution system.



LEAD AND COPPER RULE**Customer Tap**

| Parameter | Units | MCLG | AL | Reported Level ₁ | Range ₂ | Sites Over Action Limit | Typical Sources for Detected Contaminants |
|--------------------|-------|------|-----|-----------------------------|--------------------|-------------------------|--|
| Lead 2008 | PPB | 0 | 15 | 2 | ND – 10 | 0 | Corrosion of household plumbing systems; erosion of natural deposits |
| Copper 2008 | PPM | 1.3 | 1.3 | 0.075 | ND – 0.468 | 0 | Corrosion of household plumbing systems; erosion of natural deposits |

1 - Reported Level is 90th percentile value.

2 - Range is only reported if two or more samples were tested.

REGULATED CONTAMINANTS DETECTED**Waterside Distribution System**

| Parameter | Units | MCLG | MCL | Reported Level ₁ | Range ₂ | Typical Sources for Detected Contaminants |
|-------------------------------|-------|------|-----|-----------------------------|--------------------------|---|
| Fluoride | PPM | 4.0 | 4.0 | 1.1 | 0.2 – 1.4 | Erosion of natural deposits, water additive which promotes strong teeth |
| Total Trihalomethanes | PPB | NA | 80 | 46.3 | 14.0 - 119 ₃ | By-product of drinking water chlorination |
| Total Haloacetic Acids | PPB | NA | 60 | 34.0 | 12.7 – 76.6 ₃ | By-product of drinking water chlorination |
| Chlorine | PPM | 4.0 | 4.0 | 1.2 | 0.2– 2.0 | Water additive used to control microbes |

1- Reported Level is the annual average.

2- Range shows highest and lowest reported test values. Range is only reported if two or more samples were tested.

3- Testing conducted by the City of Frederick on their water distribution system.

WHITE ROCK WATER QUALITY INFORMATION 2009

PWSID 0100026

Your water source came from one (1) deep well located in the White Rock Development. This well withdraws water from the Harpers Formation. The Maryland Department of the Environment (MDE) completed the Source Water Assessment for the White Rock community water supply in 2002. Should you care to obtain a copy of this report, the Frederick County Library has a copy, MDE has several, and the Division of Utilities & Solid Waste Management has placed a copy on the Frederick County website. MDE has determined that the White Rock water supply may be susceptible to radon, depending on the MCL that is adopted for this contaminant. This water supply is not susceptible to inorganic compounds, other radiological contaminants, volatile organic compounds, synthetic organic compounds, and microbiological contaminants.

REGULATED CONTAMINANTS DETECTED

White Rock Water Treatment Plant

| Parameter | Units | MCLG | MCL | Reported Level ₁ | Range ₂ | Typical Sources for Detected Contaminants |
|------------------------------|-------|------|-----|-----------------------------|--------------------|---|
| Barium May 2007 | PPM | 2 | 2 | 0.100 | | Erosion of natural deposits; Discharge of drilling wastes; Discharge from metal refineries |
| Nitrate April 2009 | PPM | 10 | 10 | 4.3 | | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits |

1- Reported Level is the most recent value reported to MDE.

2- Range shows highest and lowest reported test values. Range is only reported if two or more samples were tested.

UNREGULATED CONTAMINANTS DETECTED

White Rock Water Treatment Plant

| Parameter | Units | MCLG | MCL | Reported Level ₁ | Range ₂ | Sample Date | Typical Sources for Detected Contaminants |
|---------------------------------------|-------|------|------|-----------------------------|--------------------|-------------|---|
| Methyl tert-butyl Ether (MTBE) | PPB | None | None | 0.6 | | April 2009 | Octane enhancer in unleaded gasoline |
| Sodium | PPM | None | None | 122.3 | | May 2007 | Erosion of natural deposits |

1- Reported Level is the most recent value reported to MDE.

2- Range shows highest and lowest reported test values. Range is only reported if two or more samples were tested.

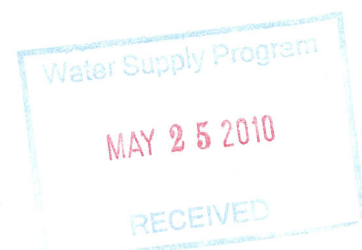
REGULATED CONTAMINANTS DETECTED

White Rock Distribution System

| Parameter | Units | MCLG | MCL | Reported Level ₁ | Range ₂ | Typical Sources for Detected Contaminants |
|--|-------|------|-----|-----------------------------|--------------------|---|
| Chlorine | PPM | 4.0 | 4.0 | 1.8 | 0.9 – 2.8 | Water additive used to control microbes |
| Total Trihalomethanes September 2007 | PPB | NA | 80 | 4.3 | | By-product of drinking water chlorination |

1- Reported Level is annual average in 2009.

2- Range shows highest and lowest reported test values. Range is only reported if two or more samples were tested.



LEAD AND COPPER RULE**Customer Tap**

| Parameter | Units | MCLG | AL | Reported Level ₁ | Range ₂ | Sites Over Action Limit | Typical Sources for Detected Contaminants |
|--------------------|-------|------|-----|-----------------------------|--------------------|-------------------------|--|
| Lead 2008 | PPB | 0 | 15 | 4 | ND – 5 | 0 | Corrosion of household plumbing systems; erosion of natural deposits |
| Copper 2008 | PPM | 1.3 | 1.3 | 0.146 | ND - 0.165 | 0 | Corrosion of household plumbing systems; erosion of natural deposits |

1 - Reported Level is 90th percentile value.

2 - Range is only reported if two or more samples were tested.

BACTERIOLOGICAL TESTING TABLE

| Parameter | Unit | MCLG | MCL | Level Found | Notes ₁ |
|--------------------------------|------------|------|---------------------------------|-------------|---|
| Total Coliform | % Positive | 0 | 1 positive monthly sample/month | 0 | 0 positive samples out of 12 samples tested. Minimum sampling frequency is 1 sample per month |
| <i>E. coli</i> Bacteria | % Positive | 0 | 1 positive monthly sample/month | 0 | 0 positive samples out of 12 samples tested. Minimum sampling frequency is 1 sample per month |

1 - Bacteriological samples are collected from sites on the distribution system.

To date, fluoride is not being added to your water supply. Please consult your dentist regarding this matter. Until the White Rock Water Treatment Plant is upgraded with a new building and new equipment, fluoride will not be added. We will provide you with advance notice of the date when fluoridation of your water supply will begin.

WINDSOR KNOLLS WATER QUALITY INFORMATION 2009

PWSID 0100041

Your water source came from eight (8) deep wells located in the Windsor Knolls Development. These wells withdraw water from the Ijamsville Formation and Sam's Creek Metabasalt. The Maryland Department of the Environment (MDE) completed the Source Water Assessment for the Windsor Knolls community water supply in 2002. Should you care to obtain a copy of this report, the Frederick County Library has a copy, MDE has several, and the Division of Utilities & Solid Waste Management has placed a copy on the Frederick County website. MDE has determined that the Windsor Knolls water supply is susceptible to nitrate and some microbiological contaminants. This water supply is not susceptible to other inorganic compounds, radiological contaminants, volatile organic compounds, and synthetic organic compounds.

REGULATED CONTAMINANTS DETECTED Windsor Knolls Water Treatment Plant

| Parameter | Units | MCLG | MCL | Reported Level ₁ | Range ₂ | Typical Sources for Detected Contaminants |
|---|-------|------|------------------------------|-----------------------------|--------------------|---|
| Barium April 2008 | PPM | 2 | 2 | 0.013 | | Erosion of natural deposits; Discharge of drilling wastes; Discharge from metal refineries |
| Dibromochloropropane October 2008 | PPT | 0 | 200 | 22 | | Runoff/leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards |
| Di (2-ethylhexyl) phthalate June 2005 | PPB | 0 | 6 | 0.7 | | Discharge from rubber and chemical factories |
| Fluoride April 2008 | PPM | 4 | 4 | 0.86 | | Erosion of natural deposits; Water additive which promotes strong teeth |
| Nitrate April 2009 | PPM | 10 | 10 | 5.1 | | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits |
| Pentachlorophenol October 2008 | PPB | 0 | 1 | 0.02 | | Discharge from wood preserving factories |
| (TT) Turbidity | NTU | 0 | < 0.3 NTU 95% of the time | 100% | | Soil Runoff |
| Turbidity | NTU | 0 | 1 NTU Max | 0.03 | 0.01 – 0.29 | Soil Runoff |

1- Reported Level is the most recent value reported to MDE.

2- Range shows highest and lowest reported test values. Range is only reported if two or more samples were tested.

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six (6) months of age. High nitrate levels in drinking water can cause Blue Baby Syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider.

UNREGULATED CONTAMINANTS DETECTED Windsor Knolls Water Treatment Plant

| Parameter | Units | MCLG | MCL | Reported Level ₁ | Range ₂ | Sample Date | Typical Sources for Detected Contaminants |
|----------------|-------|------|------|-----------------------------|--------------------|-------------|---|
| Sodium | PPM | None | None | 40.9 | | April 2008 | Erosion of natural deposits |
| Sulfate | PPM | None | None | 6.7 | | April 2008 | Erosion of natural deposits |

1- Reported Level is the most recent value reported to MDE.

2- Range shows highest and lowest reported test values. Range is only reported if two or more samples were tested.

MAY 25 2010

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LEAD AND COPPER RULE**Customer Tap**

| Parameter | Units | MCLG | AL | Reported Level ₁ | Range ₂ | Sites Over Action Limit | Typical Sources for Detected Contaminants |
|--------------------|-------|------|-----|-----------------------------|--------------------|-------------------------|--|
| Lead 2008 | PPB | 0 | 15 | 2 | ND – 3 | 0 | Corrosion of household plumbing systems; erosion of natural deposits |
| Copper 2008 | PPM | 1.3 | 1.3 | 0.228 | ND - 0.323 | 0 | Corrosion of household plumbing systems; erosion of natural deposits |

1-Reported Level is 90th percentile value.

2- Range is only reported if two or more samples were tested.

REGULATED CONTAMINANTS DETECTED**Windsor Knolls Distribution System**

| Parameter | Units | MCLG | MCL | Reported Level ₁ | Range ₂ | Typical Sources for Detected Contaminants |
|--|-------|------|-----|-----------------------------|--------------------|---|
| Total Trihalomethanes August 2007 | PPB | NA | 80 | 9.55 | | By-product of drinking water chlorination |
| Total Haloacetic Acids August 2007 | PPB | NA | 60 | 5.0 | | By-product of drinking water chlorination |
| Fluoride | PPM | 4 | 4 | 0.8 | 0.2 – 1.4 | Erosion of natural deposits; Water additive which promotes strong teeth |
| Chlorine | PPM | 4.0 | 4.0 | 1.5 | 0.3 - 2.7 | Water additive used to control microbes |

1- Reported Level is the annual average for 2009.

2- Range shows highest and lowest reported test values. Range is only reported if two or more samples were tested.

BACTERIOLOGICAL TESTING TABLE

| Parameter | Unit | MCL G | MCL | Level Found | Notes ₁ |
|-------------------------|------------|-------|---------------------------------|-------------|--|
| Total Coliform | % Positive | 0 | 1 positive monthly sample/month | 0 | 0 positive samples out of 24 samples tested. Minimum sampling frequency is 2 samples per month |
| E. coli Bacteria | % Positive | 0 | 1 positive monthly sample/month | 0 | 0 positive samples out of 24 samples tested. Minimum sampling frequency is 2 samples per month |

1 - Bacteriological samples are collected from sites on the distribution system.